

REMR MATERIAL DATA SHEET CM-SE-1.66 CONCRETE SEALER: ALOCIT AQUACOAT 28.15

1. NAME

Alocit Aquacoat 28.15

2. MANUFACTURER

Alocit Products 1005 Sussex Boulevard Broomall, PA 19008

Telephone: 215-328-9440

3. DESCRIPTION

Alocit Aquacoat 28.15 is a twocomponent solvent free epoxy resin sealant.

USES

Aquacoat 28.15 can be used as

- an adhesive to bond and repair metal or concrete damaged from wear, corrosion, or chemical reaction, even when submerged.
- a low-friction coating to reduce hydraulic losses and improve cleanability.
- a protective coating resistant to water or saltwater, oils, light acids, lyes, and sewage, and to mechanical wear, particularly if mixed with quartz or used with fiberglass reinforcement. Coats of different colors can be used as wear indicator.
- a sealant against penetration of water or debris liquids even when applied underwater.
- a decorative coating.

MANUFACTURER'S TECHNICAL DATA

Properties:

Content of

solids:

Density:

1.65

100%

Mixture (by

weight):

5 parts resin-1 part

hardener

Dilution:

Do not dilute

Cleaning of

tools:

Immediately after;

use white spirit,

thinners

Quantity required per

coat:

 $300 \text{ to } 500 \text{ g/m}^2$ (135-225 sq ft/gal)for concrete; 100 to $200 \text{ g/m}^2 (350-700 \text{ sq})$ ft/gal for steel; two coats recommended particularly on porous surfaces

Pot life at +20 °C

(+68 °F):

40 to 60 min

Drying time at +20 °C

(+68 °F):

Touch dry 6 to 8 hr;

24 hr at +10 °C

(+50 °F)

Fully cured 7 days

Flash point:

Above +200 °C

(+392 °F)

Storage

requirements: Dry rooms; temperature

> preferably below +30 °C (+86 °F); see

Caution.

Storage life: Unmixed, approximately

1 year

Colors: White, black, yellow,

> green, gray, red, or others on special

request

Container

sizes: 0.5 kg resin/0.1 kg

hardener (0.10 gal)

(Subject to

change) 1.0 kg resin/0.2 kg

hardener (0.19 gal) 2.5 kg resin/0.5 kg hardener (0.48 gal) 5.0 kg resin/ 1.0 kghardener (0.96 gal)

Special note: Alocit Aquacoat can be mixed with quartz up to 1:5 ratio to obtain mortar.

MANUFACTURER'S GUIDANCE FOR APPLICATION

Application:

Brush: Apply two coats of 300-500

> g/m^2 (135-225 sq ft/gal) on concrete, depending upon

surface.

Aquacoat must be brushed into the surface with circular motion with hard hair brush or scrub brush. Use pressure on moist, wet, submerged or oily surfaces. The second coat must be applied as soon as the first

coat is touch dry-not later.

Spraying: Use airless spraygun; type recommended: pneumatic

airless gun--WAGNER 66:70 or 66:265. See manufacturer's

data sheet, "Airless

Spraying."

<u>Instructions:</u> The accuracy of the surface preparation prior to the actual coating is essential. Please adhere to the following instructions carefully and when in doubt, please contact the manufacturer for additional information.

Surface preparation: The surface must be free of dirt and loose particles which must be removed either by sandblasting or other mechanical means. Before coating with Alocit Aquacoat 28.15, holes in concrete may be filled with Alocit Thixotrope 28.96 or Alocit Aquacoat Adhesive 28.33. Remove rust by sandblasting or with a wire brush. Chemical preparation with Alocit Rust Converter 41.21 is recommended only where sandblasting is not advisable. On smooth surfaces such as plastics, steel or nonferrous metals, grinding with a grinding tool is recommended to improve adhesion. For cleaning surfaces of any kind--concrete floors, roadways, ship decks -- the manufacturer recommends using a roughening machine to remove rust, scale, oil paints and coatings, caked oil and grease and to roughen slick concrete surfaces to prevent slippage and to improve adhesion of new flooring materials.

Unknown surfaces must be checked by a test coat. After Alocit Aquacoat 28.15 has been cured for 10 days, the adhesion can be easily checked by means of a grid cut or mechanical stress.

Note: See manufacturer's data sheet, "Preparation of Surfaces to be Coated."

Application to concrete and metal: After the surface has been prepared and leveled, apply the well mixed Alocit Aquacoat 28.15 with circular motion evenly and thoroughly with a brush. The product may also be sprayed with an airless spraygun. order to obtain a nonskid surface on concrete, a dusting of fine quartz can be applied to the surface, or a mixture of quartz and sand can be added

to the mixture of the second coat. Where oily surfaces are not present, Alocit Epoxy Resin 28.95 may be used as a primer for concrete and metal at temperatures below +12 °C (+54 °F).

<u>Caution:</u> Always use the entire can as the product cannot be reused after pot life expires.

Always empty the entire amount of hardener into the epoxy because the proper mixing ratio must be maintained. Containers are premeasured, and most of the epoxy containers are oversized to allow adding and mixing of the hardener.

Never dilute Alocit Aquacoat with thinners.

Mix thoroughly by hand or with a mechanical mixer. Make sure that the material is mixed well around the walls and the bottom of the can. Avoid stirring air into the product during mixing.

In regions with temperatures above +30 °C (+86 °F), stir resin well, all around the bottom of the can, before mixing with hardener.

7. CORPS OF ENGINEERS' EVALUATION (tested as concrete sealers only)

Physical and mechanical properties:

Percent solid (ASTM D 1644, Method A): 71.8%

Percent moisture absorption (ambient temp) (ASTM C 642-82):

1 day	0.06%
2 days	0.08%
4 days	0.12%
7 days	0.16%

Ratio of percent moisture absorption for treated to nontreated specimen (2-day submersion): 1.70%

Percent vapor transmittance (see REMR Technical Note CS-ES-1.8):

2 days	0.03%
4 days	0.05%
7 days	0.05%

Ratio of percent vapor transmittance for treated to nontreated specimen (2-day diffusion): 0.9%

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of activities involving potentially hazardous and toxic chemical substances. Manufacturer's recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets must be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.